Claims

1-5 Canceled

6. (New) A Method for determining detection thresholds dependent on tire properties for an improved detection of a loss of tire pressure in an indirectly measuring tire pressure monitoring system, the method comprising:

detecting wheel speed signals (n) of the vehicle wheels;

detecting at least one directly measured tire inflation pressure;

learning at least one reference value depending on the detected wheel speed signals at a predetermined nominal tire inflation pressure;

determining at least one coefficient which describes the characteristics of at least one vehicle tire from wheel speed variations at a tire inflation pressure variation; and

determining at least one detection threshold that depends on tire characteristics for the improved detection of tire inflation pressure loss from the coefficient found, from a designated critical tire inflation pressure loss that describes a tire inflation pressure value which, when it is not reached or is exceeded, causes a warning indicating tire inflation pressure loss to be given to the driver of the vehicle, as well as from a predefined nominal tire inflation pressure.

7. (New) A method according to claim 6, wherein the learning operation of the at least one reference value is carried out only after actuation of a trigger mechanism which indicates that the vehicle tires are filled with the predetermined nominal inflation pressure.

8. (New) A method according to claim 6, wherein the directly measured tire inflation

pressure is sensed by one or more pressure modules which are arranged in or at the tire or the wheel.

9. (New) A method according to claim 6, wherein the at least one reference value is determined from the wheel speeds (nFL, nFR, nRL, nRR) of the individual wheels (FL, RL, FR, RR) at a defined nominal tire inflation pressure (Pnominal) according to at least one of the formulas:

$$DIAG = \frac{n_{FL} + n_{RR}}{n_{FR} + n_{RL}} - 1, \text{ or}$$

$$SIDE = \frac{n_{FL} + n_{RL}}{n_{FR} + n_{RR}} - 1, \text{ or}$$

$$AXLE = \frac{n_{FL} + n_{FR}}{n_{RL} + n_{RR}} - 1.$$

10. (New) A computer program product comprising:

an algorithm defined on the computer product, wherein the algorithm defines;

detecting wheel speed signals (n) of the vehicle wheels;

detecting at least one directly measured tire inflation pressure;

learning at least one reference value depending on the detected wheel speed signals at a predetermined nominal tire inflation pressure;

determining at least one coefficient which describes the characteristics of at least one vehicle tire from wheel speed variations at a tire inflation pressure variation; and

determining at least one detection threshold that depends on tire characteristics for

the improved detection of tire inflation pressure loss from the coefficient found, from a designated critical tire inflation pressure loss that describes a tire inflation pressure value which, when it is not reached or is exceeded, causes a warning indicating tire inflation pressure loss to be given to the driver of the vehicle, as well as from a predefined nominal tire inflation pressure.